DETAILED ACTION

Response to Amendment

This Office Action is responsive to Applicant's arguments and request for reconsideration of application 09/522,709 (03/10/00) filed on 07/30/09.

Status of the claims

Claims 1-3, 17 and 19 are currently amended. Claims 20 and 21 were previously presented. Claims 4-16 and 18 are cancelled. Thus, claims 1-3, 17 and 19-21 are currently pending.

Allowable Subject Matter

Claims 1-3, 17 and 19-21 are allowed, subject to the examiner's amendment below.

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Nathaniel McQueen, Reg. No. 53,308 on November 5, 2009.

EXAMINER'S AMENDMENT

The application has been amended as follows: Please amend claims 1-3, 17 and 19. Please cancel claims 5-9, 11-12, 14-15 and 18.

1.   (Currently amended) A computerized method for managing risk in a market related to electricity delivered over a network comprised of tradable network locations, comprising the steps of:

(1) a computer modeling locational prices of electricity in the market as a linear combination of congestion prices for a plurality of congestible transmission lines in the network, wherein said step of modeling locational prices comprises:

> determining a set of distribution factors representing the physics of the flow of electricity in the network,

> determining a plurality of values representing the prices of congestion for the congestible transmission lines at a prospective time, and

> determining a pattern of spot locational prices in the network at the prospective time, wherein said pattern of spot locational prices is a function of said set of distribution factors and said plurality of values representing the prices of congestion for the congestible lines;

(2) [[a]] the computer creating a portfolio of future positions with respect to the set of distribution factors which includes:

> selecting a portfolio of price risk instruments which represent the set of distribution factors describing the physics of the flow of electricity in the network and the available market [[of]] for the price instruments; and

(3) [[a]] the computer producing a combination of price risk instruments with respect to the set of distribution factors for the market in which an underlying position in the market is determined from:

   (a) the spot locational prices determined in step (1), and

   (b) the portfolio of future positions with respect to the set of distribution factors created in step (2), such that the difference between the underlying position in the market with respect to the set of distribution factors and the portfolio of future positions with respect to the set of distribution factors is calculated such that at least one amount of each of the price risk instruments are proportioned, thereby interlocking eventual locational prices and reducing an effect of the congestion prices for the plurality of congestible transmission lines on the locational prices of the electricity.

2.   (Currently amended)   The method according to claim 1, wherein the step of producing the combination of price risk instruments further includes the steps of:

creating a table of congestion events with respect to the tradable network locations;

populating the table with values for the relative impact on the locational price of each congestion event;

creating from the table a portfolio of future positions with respect to the set of distribution factors;

assessing the risk of each of the future positions in the portfolio of future positions with respect to the set of distribution factors by assessing the number of congestion events that would result in a loss for the portfolio; and

determining from the assessment of risk which portfolio would result in the lowest risk.

3.   (Currently amended)   The method according to claim 2, wherein the step of

creating a portfolio of future positions <u>with respect to the set of distribution factors</u>

includes selecting a portfolio **y** of price risk instruments, such that:

z'A - y'P'A = 0,

where **A** represents distribution factors describing the physics of power flows in the

network, **P** represents the available market of price instruments, and **z** represents a

market participant's underlying position in the market at the prospective time **T**, and

wherein the portfolio includes a set of positions and primes denote transpositions.

5.   (Cancelled)

6.   (Cancelled)

7.   (Cancelled)

8.   (Cancelled)

9.   (Cancelled)

11.   (Cancelled)

12.   (Cancelled)

14.   (Cancelled)

15.   (Cancelled)

17.   (Currently amended) A computer-readable medium bearing instructions for

managing risk in a market related to electricity delivered over a network, said

instructions being arranged to cause one or more processors upon execution thereby to

perform the steps of:

(1) modeling locational prices of the electricity in the market as a linear combination of

congestion prices for congestible lines in the network, wherein said step of modeling

locational prices comprises:

> determining a set of distribution factors representing the physics of the flow of
>
> electricity in the network,

> determining a plurality of values representing the prices of congestion for the
>
> congestible transmission lines at a prospective time, and

> determining a pattern of spot locational prices in the network at the prospective
>
> time, wherein said pattern of spot locational prices is a function of said set of
>
> distribution factors and said plurality of values representing the prices of
>
> congestion for the congestible lines;

(2) a computer creating a portfolio of future positions <u>with respect to the set of</u>

<u>distribution factors</u> which includes:

> selecting a portfolio of price risk instruments which represent distribution factors

describing the physics of the flow of electricity in the network and the available market

of price instruments; and

(3) [[a]] <u>the</u> computer producing a combination of price risk instruments for the market in

which an underlying position in the market is determined from:

> (a) the spot locational prices determined in step (1), and

(b) the portfolio of future positions <u>with respect to the set of distribution factors</u> created in step (2), such that the difference between the underlying position in the market with respect to the distribution factors and the portfolio of future positions with respect to the <u>set of</u> distribution factors is calculated such that at least one amount of each of the price risk instruments are proportioned, thereby interlocking eventual locational prices and reducing an effect of the congestion prices for the plurality of congestible transmission lines on the locational prices of the electricity.

18.   (Cancelled)

19.   (Currently amended) A portfolio generating system and portfolio comprising:

a computer-based system configured to generate a portfolio having a plurality of price risk instruments by carrying out the following steps:

(1) modeling locational prices of electricity in the market as a linear combination of congestion prices for a plurality of congestible transmission lines in the network, wherein said step of modeling locational prices comprises:

determining a set of distribution factors representing the physics of the flow of electricity in the network,

determining a plurality of values representing the prices of congestion for the congestible transmission lines at a prospective time, and

determining a pattern of spot locational prices in the network at the prospective time, wherein said pattern of spot locational prices is a function of said set of

distribution factors and said plurality of values representing the prices of

congestion for the congestible lines;

(2) ~~a computer~~ creating a portfolio of future positions which includes:

selecting a portfolio of price risk instruments which represent distribution factors

describing the physics of the flow of electricity in the network and the available market

of price instruments; and

(3) ~~a computer~~ producing a combination of price risk instruments for the market in which

an underlying position in the market is determined from:

(a) the spot locational prices determined in step (1), and

(b) the portfolio of future positions <u>with respect to the set of distribution factors</u>

created in step (2), such that the difference between the underlying position in the

market with respect to the <u>set of</u> distribution factors and the portfolio of future positions

with respect to the distribution factors is calculated such that at least one amount of

each of the price risk instruments are proportioned, thereby interlocking eventual

locational prices and reducing an effect of the congestion prices for the plurality of

congestible transmission lines on the locational prices of the electricity;

the portfolio comprising:

the plurality of price risk instruments for a market related to electricity delivered over a

network,

wherein the price risk instruments **y** are proportioned such that **z'A - y'P'A** = 0,

A represents distribution factors describing the physics of power flows in the network,

P represents the available market of price instruments,

z represents a market participant's underlying position in the market at a prospective time **T**, and

primes denote transpositions,

wherein said computer-based system comprises:

a communication mechanism for communicating information;

a processor coupled to the communication mechanism for processing information;

a dynamic storage device coupled to the communication mechanism for storing information and instructions; and

a static storage device coupled to the communication mechanism for storing static information and instructions.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

Please refer to the prosecution history of the instant application. In particular, the applicant's remarks, as noted below which distinguish the instant claimed invention from the closest prior art references listed below.

1. "Pricing Scarce Transmission In a Bilateral Market," by Steven Stoft, January 31, 1998. (hereinafter Stoft). See Applicants Remarks, 07/30/09, pgs. 13-15.

2. "Primer on Electricity Futures and Other Derivatives," by S. Stoft, T. Belden, C.

    Goldman, and S. Pickle, January 1998. See Applicant's Remarks, 07/30/09, pgs.

    13-15.

The examiner incorporates the applicant's remarks by reference as reasons for

allowance of claims. 1-3, 17 and 19-21. NOTE: Examiner clarifies the record to state

that no admissions were made by the examiner in the interview 07/16/09.

Claim 19 has been interpreted to mean at a computer-based system comprises a

processor (or simply a computer) which is a tangible component (physical element) that

is configured (i.e. programmed) to carry out the recited process steps of the claim.

Any comments considered necessary by applicant must be submitted no later

than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on

Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to SARA CHANDLER whose telephone number is

(571)272-1186. The examiner can normally be reached on M-F, 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, James Kramer can be reached on (571)272-6783. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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published applications may be obtained from either Private PAIR or Public PAIR.

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SMC

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Primary Examiner, Art Unit 3693